Ref II 7

SUPPLEMENTARY INFORMATION

ZONING AND LAND USE

RE: LANDFILL PERMIT 1975-71-DE

JOHN SEXTON CONTRACTORS CO.
900 JORIE BOULEVARD
OAK BROOK, ILLINOIS 60521

The cross-references in this submission and the Appendix indeces are to the re-phrased and elaborated "8 Point Summary".

1. SIGNIFICANT AREA HISTORY (See Exhibit A-5)

The major historical significance of the Richton Park/Matteson/Chicago Heights area is the Old Sauk Trail, the original east-west route followed by the early settlers of the 1800's.

In the early 1800's this area was the edge of the new frontier, most of the settlers establishing themselves along Sauk Trail and Hubbard's Trail (Chicago Road). These two roads were the most important highways of the 1800's, first, only as Indian paths and explorers trails, they soon became important crossroads to the west.

The intersection of Sauk and Hubbard's Trails became known as Brown's Corners after the Adam Brown family, the first permanent white settlers who established their home at the crossing of the two roads. The very first settlers in the area were the Absalom Wells family, who built a cabin in 1833 on the land now known as Woodrow Wilson Woods. The Wells family settled for a short time and then moved on further west.

These locations of early settlement were a part of what was originally called Bloom Township, which later became known as Thorn Grove in 1850 and is today Chicago Heights. The Village of Matteson was platted in 1855 and was named for Governor Joel Matteson of Illinois. Just south of Matteson lies Richton Park, originally known as Richton and named for Jacob Rich, one of its founding fathers.

In 1893 John V. Steger opened his piano factory in the small village of Columbia Heights just south of Chicago Heights. His was one of the first large industries in the area, employing 2,800 craftsmen within twenty years of beginning operation. In 1897 Columbia Heights incorporated and changed its name to Steger in honor of Mr. Steger's great contribution to the prosperity of the community.

Like many northern communities prior to the Civil War, there were in this area connecting links in the Underground Railroad's effort to move slaves north to Canada and freedom. Many families along the Sauk Trail were known to have given shelter and aid to the slaves as they migrated north.

There is very little documented information on the Richton Park/Matteson/ Chicago Heights area since the turn of the century. In referencing the Illinois Historic Structures Survey's, "Inventory of Architecture before W.W.II", we were unable to locate any significant historical structures within a mile of the proposed landfill site.

None of the historical records consulted provided any indication that the proposed landfill site or its immediate vicinity has earned special consideration because of historical, archeological, or current events of national, regional or local interest.

Nothing proposed in the plans for the landfill site will alter the existing Sauk Trail. The natural beauty attributed to the existing trees along Sauk Trail will be preserved. Additional plantings will be made to augment the existing, thus significantly contributing to the improvement of the general area.

2. PRESENT AREA LAND USES AND DEVELOPMENT CONCEPTS (Exhibits A-3 & A-4)

The area north of the E.J. & E. Railroad is presently zoned industrial by the Village of Matteson, as is the north-east quarter of Sec. 29, T35N, R12E of the 3rd P.M. This intended use would appear to be appropriate considering the obvious presence of railways (2), petroleum products lines (4), and electrical transmission lines (132KV).

One tract of land west of Central Road and adjacent to the E.J. & E. Railroad is presently being developed. The site will become a terminal for the general commodity carrier "Daily Express". The express company is prepared to receive a minimum of 10 to 15 trucks per day with parking area and storage lot capable of expansion.

The property immediately west of the site, while zoned residential (R4, Cook County), is occupied by the Northern Illinois Gas Company as a storage facility (underground containers 20,000,000 C.F.) and a propane injection facility for gas as produced by refineries in the Joliet area. (Reported traffic flow 10 to 50 trucks per day.) The NIGAS representatives indicate that their ultimate goal is the development of an industrial park. This development has been delayed because of the present gas restrictions for new installations.

Adjacent to the east of the property is the 300 foot right of way of Interstate 57, a heavily traveled highway. The highway runs in a north-northeast south-southeast direction and hence the subject property is wider at its north boundary than at its south boundary. Immediately to the east of I-57 is an approximately 15 acre parcel having the same ownership as the subject property. The south-east corner of the subject property is

approximately 990 feet west of the Richton Park village limits, the nearest property within the Village being a vacant R-4 multiple residential zoned parcel. The northest corner of the subject property is 450 feet west of the same property line as extended in a northerly direction. I-57 rises gradually as it moves north so that at and near the northern boundary of the subject property it is an elevated highway which effectively blocks any direct view and gives the appearance of an even greater separation.

3. GENERAL DESCRIPTION OF SITE (Exhibits A-1, A-2 and B-1)

The proposed landfill site is a low-lying 84.9 acre parcel. Its physical features have been further exaggerated by the presence of two major highway structures. The property is bounded on the east by I-57, on the south by Sauk Trail, on the west by Central Road and on the north by four major pressure pipelines for petroleum products, a 132 KV. transmission tower line and the main belt of the Elgin, Joliet and Eastern Railway.

The northern end of the subject property was the source of earth used in the construction of the approaches to the railroad overpass on I-57 and may have been utilized in constructing similar approaches to the highway overpass at Sauk Trail. In general the excavation is less than six feet in depth and has accumulated water, the containing soils being exceptionally impermeable.

The southern end of the site contains a low-lying crescent shaped expanse of muck, a deposition of many years standing. The muck has reduced the usable acreage for agricultural purposes in years past and presents an even greater problem for construction of buildings and grounds, etc.

The ecological character of the site is similar to many areas in Rich Township and southern Cook County. There are no threatened or endangered species of plant, animal, bird or reptile life apparent on the site according to ENCAP, Inc. which has performed the detailed analysis provided in the appendix of this report. (Exhibit B-1).

The local terrain is gently rolling. The grade separation for area highways and railroads are points of higher elevation accented by the side slopes of 3:1. The site will be developed using 4:1 slopes and gentle slopes to complement the adjacent area. Construction of the fill will be accomplished behind advancing berms of sufficient height to limit views into the site at all stages of actual refuse placement. (A-7).

4. PROPOSED SITE DEVELOPMENT & CONSTRUCTION (Exhibit A-7, B-2, B-3, B-7 & Original Application)

All portions of the site will not be instantaneously constructed. The construction sequence will be approximately as follows:

Site Preparation

- Strip top soil from initial trench and berm areas for application to berms surfaces and final cover.
- Excavate a portion of Trench #1.
- Construct earth berm west and south sides, apply earth fill to outermost faces first to provide early "line of sight" screening.
- Construct entrance roads, buildings and complete fencing.

Site Construction

- Place refuse in completed south end of Trench No. 1.

  Continue trench excavation and berm building sequentially excavate earth, cover and place refuse.

- Construct east berm and temporary berms as may be required to screen (line-of-sight).

Travelers on I-57 would have a view into the site for a short portion of the travel southbound. Insofar as possible the berms and vegetation will be used to screen operations, as the northern portion of the site will not receive refuse until the fifth year or later. By that time, sufficient natural screening should be generated to interrupt if not eliminate all site views.

The landfill will not obstruct required highway sight distances, will not create an attraction diverting drivers attention from the road nor will sounds or smells be in any way disturbing or offensive to the travelling public.

Access to and from the site will be by separate entrance and exit so designed that trucks entering the site will almost immediately disappear from view. We anticipate that most of the traffic will approach the site from the north as major population centers are readily served by major arteries and intersections north of the proposed site. Minor amounts of traffic to the site (for example, refuse originating in Richton Park) may utilize Sauk Trail and Central Road from the south.

Should the local community deem the southern traffic approach from the east inappropriate for the area traversed, all regular users of the site will be so instructed, thus assuring that local traffic conflict will not occur.

There are no weight, height, or width limitations on the proposed access routes. Locally both Steger Road and Harlem Avenue have posted 10 ton load limits in effect. Neither road is considered an access to the landfill site and therefore will not limit the usefulness of the site to the surrounding

communities.

As appears from the original application, there will be no sanitary landfill along the west and south perimeter of the property for a distance of 300 feet from the center lines of Central Road and Sauk Trail. On this perimeter will be located the screening berms constructed from clay excavated from other portions of the subject property. After the landfill operation in the interior is completed, a portion of these berms will be used for final cover, leaving a substantial non-landfill perimeter area suitable for office-research or light industrial development. The landfill portion of the subject property would be used in part for accessory parking and in part for open land uses. The open land use can be suitably screened and operated by berms, plantings and fences from the expressway, the Elgin, Joliet and Eastern Railroad, the power lines and the pressure pipelines. The final development just described should be compatible with the proposed and existing industrial areas north and west and also with the residential areas east of I-57. Accordingly, the project is well conceived to be complementary to the character of the surrounding area both during construction and after completion.

The sanitary landfill method of reclamation is the only feasible interim development of this land. Without sanitary landfill, no development is possible. The following are alternatives to the sanitary landfill method of reclamation: (1) Additional excavation of the north portion to provide the 600,000 c.y. of fill required to bring the south portion up to adequate grade, which would result in an 80+ acre site only half of which is capable of development. (2) Obtaining 600,000 c.y. fill from some other location to fill only the south portion, leaving the north portion in its present condition.

(The cost of fill is over $1 per cubic yard and hence the total cost of this alternative would be over $600,000.). (3) Obtain outside fill to raise the entire site above Central and Sauk Trail Road grades, 1,500,000 c.y. for over $1,500,000.). (4) Fill only the frontage areas on the south half of the site, using on-site earth, making 60% to 75% of the site unusable for any known purpose.

As appears from the ENCAP, Inc. study, Exhibit B-1, the subject property is not available as a natural area; were it to be used as such there would be a need for extensive and costly ecological restoration and improvement. Accordingly, the first, second and fourth alternatives are not economically feasible and could create local environmental problems.

Neither is the third alternative economically feasible. While it concludes with a 100% site utilization, the $1,500,000 filling cost, when added to the initial $500,000 land cost, makes the sale or use of the property economically prohibitive. Elaborating on the economics of this alternative, we should examine utilization of the property under existing Cook County R-4 single family zoning. 142 single family dwellings could be constructed, but the raw land cost per dwelling unit would be approximately $14,000. To this would be added the cost of 10,000 linear feet of public streets and cul-de-sacs, 10,000 linear feet of water lines, 10,000 linear feet of sanitary sewer, 5,000 linear feet of storm sewer, four or more major intersections with Central Road and Sauk Trail, pedestrian traffic along Sauk Trail and Central Road, pedestrian traffic over I-57 on Sauk Trail by both adults and children, work and school bound. It should also be pointed out that with the average family of 3.75, school children in the subdivision could number as many as

248, for which either buses or pedestrian access to schools are required by law. Alternative #3 would obviously increase the local comminity tax burden.

The proposed office-research or light industrial use alternative based on sanitary landfilling procedures would minimize the required length of water lines, sanitary and storm sewers and streets. Such development would make no area demands upon school rooms or transportation systems. Pedestrian traffic would be naturally limited and only private access to streets and highways would be provided. There would be no major traffic intersections.

5. GROUND AND SURFACE WATERS (Exhibit A-2 & A-4 & Application)

Although the land is low and retains water from local storm water, etc., a current analysis of flood prone areas in Northern Illinois made by the Northeastern Illinois Planning Commission indicates that the nearest such areas lie one quarter mile to the west on the extension of Hickory Creek. The USGS hydrogeologic investigations for the area (HA-90-Harvey Quad. and HA-152 Tinley Park Quad.) identify drainage from the project site into each of the outlets named previously. The USGS survey notes that the northeast corner of the site was not well drained prior to the construction of I-57. The area so designated extends easterly to the mid-line of section 28, T35N, R13E, of the 3rd P.M., but does not currently appear on the "flood prone" maps.

Using the Rational Method formula of determining peak flows from each site, each of the two watersheds will receive between 50 and 75 C.F.S. Assuming that peak runoff occurs,in a two hour period of intense rain (3.45") equal to a 100 year storm it is estimated that each drainage area will receive 62 C.F.S.

The presence of a drainage area "divide" on the site has two advantages; (1) a limited impact upon either as a result of changes in physical configura-

tion and (2) being at or near the drainage area origin, major water diversion will not be a site development problem. Construction will be accomplished in a manner which considers the separation of watersheds and insofar as possible maintain the previous proportionality of flow.

At the present time this runoff reaches the receiving Butterfield Creek by following a rather tortuous route under the railroad tracks near the northest corner of the site, thence meandering north and west to and under Central Road at a point near the southwest corner of the NW¼ of the NW¼ of Sec. 28, T35N, R13E of the 3rd P.M.

Butterfield Creek is a part of Rich No. 2 Drainage District, established in 1906 and currently listed as "active". A search of public records indicates conflicting data as to the south limits of the Drainage District. Neither limit includes the tract of land upon which this project is to be constructed. The storm water drainage to Hickory Creek occurs through a relatively new drain which lies along the north right of way of Sauk Trail. West of Cental Road the storm flow is contained in an open road ditch which flows westerly along Sauk Trail to Hickory Creek.

The proposed project will continue the drainage patterns established in the area. The time of concentration will be lessened because of the improvement of flow channels and the increase of slopes. The time of concentration will be increased through site vegetation and judicious placement of benches, swales and retention areas. (Too rapid runoff creates erosion problems, thus exposing refuse and/or carrying silt into the receiving courses.)

During construction, all storm water in trenches will be pumped to the drainage ditches in proportion to their ability to receive waters at that time. Pumping delays will be utilized to provide a reservoir effect, discharging waters in a manner that will not produce negative impacts upon surrounding property owners.

Waterways, drainage channels and storm sewers which were inadequate before the commencement of this project will not be adversely impacted. Their normal load will not be reduced by virtue of this land reclamation project.

The presence of clay till beneath the site as indicated in the geological and hydrogeological report will essentially isolate the site from surrounding potential and actual water sources. The clay till typically has a permeability rating of 3×10^{-7} which for all practical purposes is impermeable. All exposures of sand and gravel having greater permeability will be sealed off by over-excavating and placing select materials in 6 inch lifts providing an impermeable barrier of a thickness described in the plans. From a practical standpoint there will be no flow from the site until the liquid elevation within the site is equal to or greater than that in the surrounding area.

In the zone of saturation, outward liquid movement will only take place when the liquid level within the site exceeds the capillary water table to the extent that flow is induces.

This site is especially well suited to provide liquid containment and ionic exchange, thus protecting the local groundwater sources from adverse impact.

6. SUMMARY AND CONCLUSIONS

The proposed landfill site is situated as to avoid damage to features of archeological and historical significance. The design and operation of the site will ultimately provide an enhancement of the "beauty" which may now be attributed to the site.

There will be no health hazards or sense offenses created by the establishment of this project. Disease-bearing vectors may be more easily eradicated by virtue of its establishment, thus a positive impact on health is anticipated.

Taking into account the present development of adjacent areas, the likely and planned future development and the buffer of the wide I-57 right of way, the proposed low density office-research or light industrial end use is completely compatible. The development plan of the proposed landfill operation, which provides for building sites and open space, is unique and assures that the values associated with any emerging urban community will be maintained and enhanced.

The present site conditions are that of a low-lying wet area and an unsightly borrow pit of less than usual attractiveness. Filling of the site will permit general development west of I-57 to proceed in an orderly manner, eliminating skip development.

It is obvious that all of the communities in northeastern Illinois are in need of solid waste disposal facilities. The more suburban the community, the less likely is the potential for resource recovery or energy concepts to be economically appropriate. Establishment of this landfill at this time will assure least cost disposal for the local area during the period of landfill

construction. It is estimated that resource conservation tactics may become an economic reality in the time period. Should this occur, a landfill will still be a physical necessity. Thus, the area's need is and will remain throughout site life.

The site design provided has considered the environmental quality of air and water. With the experienced operation and maintenance of John Sexton Contractors, there will be no opportunity for environmental insult.

The site is extremely well suited to the intended use because:

1. The site must be reclaimed to become a community asset; the present conditions make it valueless.
2. The site is convenient to both north-south and east-west transportation without traveling through residential areas or utilizing heavily congested, underdesigned highways.
3. The site will fill a local need for low cost solid waste disposal in an era when the "utility" or "services" dollar is being stretched to cover many new facilities for the community's growth. The ultimate office-research or light industrial development will provide both increased tax dollars and open space with no community investment.

We believe that we have chosen an excellent site, in an excellent geographical area where a sanitary landfill can provide local service while reclaiming low-lying land. This property reclamation ultimately will enhance its value to the owners, area development and local governments.

A FLORAL AND FAUNAL SURVEY

AND HABITAT ASSESSMENT

OF A COOK COUNTY, ILLINOIS SITE

for

Eldredge Engineering Associates, Inc.

by

ENCAP, Inc.
Environmental Consultants and Planners

P.O. Box 721
DeKalb, Il 60115

May 10, 1976

INTRODUCTION

The area referred to herein as the study site lies in southwestern Cook County, Illinois. It is bounded on the north by a natural gas pipeline and Commonwealth Edison Co. easement on the south side of the E. J. & E. Railroad, on the east by Interstate Route 57, on the south by Sauk Trail Road, and on the west by Central Avenue. The biological survey teams visited the study site on April 27 and 30, 1976.

The purpose of the study was to describe the ecological character of the site and to evaluate its quality as a natural habitat. To this end, approximately 30 man-hours were spent on the site. The plant species present were recorded on each of the seven somewhat distinct habitat areas on the site. This information is described in terms of habitat quality and predictions as to the future of the habitats by natural ecological processes. Approximately 350 fish were seined from the borrow pit pond in order to determine the species composition of this body of water. The deepest portion of the southern wetland was also seined for fish. Published literature was consulted to ascertain what species of mammals, birds, reptiles, and amphibians could potentially inhabit habitats such as these in southern Cook County. Field evidence of terrestrial vertebrate occurrence is noted in our tabulations, but a thorough determination of species actually present on the site would require a very intensive field effort over many months.

Area 1: Old Farmyard

Of all the upland sites on the tract this one probably has been open to the development of a flora the longest. Mostly what now grows here is a combination of a few remnants of the cultivated or planted ornamental plants such as honeysuckle, roses, and violets, and the annual and perennial weeds which invade disturbed areas around buildings, pens, drives and unattended flower beds. Also here are aged fruit trees (apples and a bush cherry), which have ceased their period of productivity owing largely to neglect. Since the razing of the farm buildings the newly exposed earth mixed with building rubble gives the area the aspect of a wasteland. Among the old foundations aggressive annual weeds such as the Giant Ragweed, early colonizers on bare ground, have taken hold in great abundance.

The trees which remain fall into two categories: those which were planted for shade or ornamental purposes and those which volunteered as adventives. Among the first group are Apple trees, a Black Walnut, and one specimen of Catalpa. All the others belong to the group of adventives, although this is not to say that any individual of the second group was not actually cultivated. Indeed, of the numerous specimens of Box-edler, the most abundant tree species present here, some old individuals show signs of having been pruned many years ago, indicating they were treated as cultivated plants even though they may not have been planted. Their random and crowded placement suggest that they originally came in as adventives. The Box-elder, because

Area 1: Old Farmyard (continued)

of associated insect pests which become a nuisance, is rarely deliberately planted. Its seed blow in on the wind, as is the case also with the species of elm which is found here. Mulberry seeds usually are distributed by seed-eating birds. Once these trees were established, however, the previous owners of the site probably encouraged their growth, perhaps even giving them some care, hoping to have the benefit of shade from some and, perhaps, fruit form the Mulberry.

If the area around the old farmyard is to remain as a visual amenity on the tract it will be very important to start as soon as possible on a program of pruning and mowing. The pruning should be done to convert the apple trees and some of the other hardwoods into more ornamental specimens and to increase their longevity. Mowing should be effected to prevent the area from passing over into a non-"tamed" type grouping. In the disturbed places beneath the older trees are appearing abundant seedling populations of nearly all the trees which are on the species list (table 1), but most notably Box-elder. In a very short period of time the site will acquire a thickety and uncared-for appearance from this species alone, which might be hospitable to small mammals and birds but would give the average passerby the impression of a wasteland.

Area 2: South Field

This abandoned field has had some disturbance to the surface soil, perhaps in the form of partial removal of the topsoil. The weed species present here suggest the area has been free of cultivation (that is, plowing) for a longer period of time than the remaining old fields on the tract. Here are found a diverse mixture of the native and introduced annual and perennial weeds, of which the most abundant species conspicuous in the springtime are the common Dandelion, Yellow Rocket, Giant Ragweed, and Curly Dock. Later in the season, when the taller growing plants have overtopped the spring flowering species the picture of abundance will doubtlessly change considerable. The foxtail grasses likely will become the predominant plants.

On an east-west transect from the old farmyard the south field slopes down to a severely scalped area from which all of the previous year's weed flora has been removed. Becoming established in this bare ground are shoots from the perennial parts of Canada Thistle and Sow-thistle. Continuing the transect beyond a moist depression to the far west portion of the south field the species composition in the scalped area changes such that Knotweed, Curly Dock, and Cocklebur make up the flora. In the depression, more or less in the middle of this scalped area and toward the south boundary of the tract there has developed an improverished swale flora consisting of River Bullrush and Sandbar Willow. It is through this swale that the tract drains during periods of high rainfall. The drain passes beneath Sauk Trail Road.

Area 3: Western and Central Old Fields

This L-shaped tract borders the west side of the study site and crosses it completely to the east side adjacent to Interstate 57. It is the most recently cultivated of the old fields and evidence of past crops can be found in the litter. The assemblages of species and their relative abundances are typical for such areas in northern Illinois. Extensive populations revealed in the old stalks of the Knotweed and Giant Foxtail cover much of the area. In patches the predominant species shift to other annual weeds such as the Purslane-speedwell, but the overall species composition changes very little from place to place throughout the field. A few perennial species now having taken hold will gradually cause a change in the species composition and relative abundance of the species as these crowd out the annuals. Among the perennials falling into this group are the Hungarian Brome, Curly Dock, Common Milkweed, Hedge Bindweed, and Canada Thistle. At the present time none of these species are the most abundant.

Paralleling the freeway about 75 feet west is an old fence-line with most of the fence rusted and fallen. Along this line the field has not been plowed recently. Here has grown up a line of scrubby trees including Box-elder, Mulberry, and Wild Black Cherry. The area beneath the fence is essentially a Kentucky Blue Grass sod with common broad-leaved weeds such as Yarrow and Wild Strawberry.

Area 4: Overburdon Piles

In an effort to get at desirable fill material for the construction of I-57, it has been necessary in the past to pile up the overburden above the more useful Valparaiso till. The overburden at this site has been deposited in the far northeastern sector of the study site. Here one finds an interesting assemblage of plants. First, there are those plant species which previously were present as perennials in the formerly undrained depression which has now become the borrow pit. In the process of stripping the overburden, these perennial species or their underground perennial parts have survived in the moisture-holding organic soils which have been stacked up. They now continue to flourish in this artificial upland area. Meanwhile, a typical pioneer flora has developed upon the exposed soils thereby explaining the unusual mixture of wetland and upland plants that are presently found here. Of the wetland plants that participate in this phenomenon, the most conspicuous one is the Reed, a very tall-growing grass. Others that belong in a wet or moist habitat with the Reed are Blue Flag, Swamp Milkweed, and Tall Meadow Rue. The upland pioneer plants are represented by such familiar species as Cottonwood, Box-elder, Black Raspberry, and the Common Evening-primrose. Here also is found one individual of an unusual tree species, the Corkscrew Willow, which undoubtedly has come into the area as an escape from cultivation, since this species is native to Korea and widely sold in north temperate areas as an ornamental.

Area 5: Wetlands

There are two major wetland areas within the confines of the site. The larger of these is the old borrow pit created to provide fill for I-57. This borrow pit or pond lies in the northern half of the study site. In the southern half of the study site lies the other wetland. It is in the shape of a large crescent that begins at the right-of-way of I-57 and swings southwestward toward the southern boundary of the site.

Area 5a: The Southern Wetland

In considering the southern wetland it should be noted at once that much of this wet area reduces in mid-season to a muddy and poorly-drained depression. Only a small portion of it, that part nearest the I-57 right-of-way, remains wet throughout the season. This conclusion is based upon the evidence in the flora, as the two plant species making up the bulk of the vegetation are River Bullrush and Sandbar Willow. Present in very low numbers are additional wetland species such as Petioled Willow (only a couple of plants seen), Water Knotweed, Common Water Horehound, Ditch Stonecrop, and Bittersweet Nightshade. All of these species are of the sort which can tolerate drying up of the wetlands and can flourish in a terrestrial habitat once established. At the same time they tolerate long periods of inundation even throughout the season.

In association with the more or less permanent pond-marsh next to the I-57 right-of-way there has developed a scrubland on

Area 5a: The Southern Wetland (continued)

the adjacent upland topography which undoubtedly receives an influence from the wetness in this poorly drained area. Here has developed a thickety growth of Box-elder, some Mulberry, and Wild Black Cherry. Upland from this thicket the area becomes old part of the old field.

Area 5b: The Northern Wetland

In both the east and the west ends of the borrow pit pond there has developed an extensive littoral zone of emergent vegetation. Such a vegetation type can also be found off the northwest corner of the overburden piles. Only the south shore and a portion of the north shore have poorly developed marginal vegetation. Where a good littoral zone has developed the predominant species are the Great Bullrush and the Common Cattail, with perhaps some plants of the Narrow-leaved Cattail mixed in (the two are not easily discriminated in the spring). Among these larger plants there occur several small creeping and upright herbaceous species such as rushes, spike-rushed, a bedstraw, and the familiar Mad-dog Skullcap. The species diversity increases as the water gets shallower until on the muddy margin such larger-growing species as Sandbar Willow and Cottonwood are found. Over all the littoral zone species composition changes very little from place to place around the pond. In some places the littoral zone has not developed due to the steep slope of the shores. Off the northwest corner of the pond there is an occurrence of the White Water-lily which does not occur

Area 5b: The Northern Wetland (continued)

generally in other parts of the borrow pit. Two places in the pond where the littoral zone does take on a slightly different appearance are off the northwest corner of the overburden piles where the White Water-lily forms extensive beds and off the far southeast corner of the overburden piles where a substantial colony of the White Water Crowfoot extends its flowering branches above water level.

Area 5c: Old Marsh

In the extreme northeast corner of the study site there is a marshland relict which seems not to have been significantly disturbed by the build-up of the overburden piles which have cut off this small wetland from the rest of the borrow pit pond. In this small marsh are found several plant species which do not occur elsewhere in the pond. Among these are the Yellow Water Crowfoot, Blue Joint Grass, Eel-grass, Small Pondweed, Great Bladderwort, Water Heartsease, and Grass-leaved Pondweed. These species are all indicative of a stable water supply and of enriched waters in aquatic areas where a substantial mucky bottom has accumulated. Some of these species are of the sort that they can survive a lowering of the water level to the point of growing only in muck but not to the point of having to grow as a semi-terrestrial plant. In mid-season, when the water level probably does drop somewhat, the area acquires a quite different aspect. Across the area of what now appears as open water there

Area 5c: Old Marsh (continued)

has developed a uniform stand of Blue Joint Grass. This is a tall-growing species which would obscure any water present and tend to give the area the appearance of a meadow. Again, this luxuriant vegetation is an indicator of very fertile conditions. One must conclude that this marsh has reached the stage in its development when it is gradually coverting from a true marshland into a semi-aquatic area where the organic sediments are increasing in their rate of accumulation and are contributing to the eventual transformation of the site into a poorly drained terrestrial habitat. But, because most of the above mentioned species have perennial parts anchored in the substrate, it will be many years before there is a substantial change in the species composition from a flora typical of wetlands to a flora which reflects more an upland character.

Table 1. PLANT SPECIES OBSERVED AT THE STUDY SITE. THE SEVEN HABITAT AREAS ON THE SITE (1 THROUGH 5c) ARE AS DESCRIBED IN THE ACCOMPANYING DISCUSSION

	Habitat Area						
	1	2	3	4	5a	5b	5c
Apple *Pyrus malus*	X						
Bittersweet Nightshade *Solanum dulcamara*				X	X		
Blackberry *Rubus allegheniensis*				X			
Black Mustard *Brassica nigra*		X					
Black Raspberry *Rubus occidentalis*				X			
Black Walnut *Juglans nigra*	X						
Black Willow *Salix nigra*					X		
Blue Flag *Iris virginicus*				X			
Blue Joint Grass *Calamagrostis canadensis*							X
Box-elder *Acer negundo*	X	X	X	X			
Bull Thistle *Cirsium vulgare*	X	X	X				
Bush Cherry *Prunus* sp.	X						
*Canada Thistle *Cirsium arvense*	X	X	X	X			
Catalpa *Catalpa* cf. *bignonoides*	X						
Catnip *Nepeta cataria*							
Chickweed *Stellaria media*	X						
Cleavers *Galium aparine*	X	X		X			
Common Burdock *Arctium minus*	X	X					
Common Cattail *Typha latifolia*						X	X
Common Dandelion *Taraxacum officinale*	X						
Common Elm *Ulmus americana*	X						

Table 1. (continued)

	Habitat Area						
	1	2	3	4	5a	5b	5c
Common Evening-primrose *Oenothera biennis*				X			
Common Milkweed *Asclepias syriaca*		X		X			
Common Plantain *Plantago major*	X						
Common Pondweed *Potamogeton natans*						X	
*Common Ragweed *Ambrosia artemisiifolia*		X					
Common Water Horehound *Lycopus americanus*					X		
Common Waterweed *Elodea canademsis*						X	X
Corkscrew Willow *Salix matsudana*				X			
Cottonwood *Populus deltoides*				X		X	
Curly Dock *Rumex crispus*	X	X	X				
Daisy Fleabane *Erigeron annuus* & *Erigeron strigousus*	X	X	X				
Ditch Stonecrop *Penthorum sedoides*					X	X	
Dogbane *Apocynum* cf. *sibiricum*				X			
Eel-grass *Vallisnaria americana*							X
Elderberry *Sambucus canadensis*	X						
English Plantain *Plantago lanceolata*		X					
False Solomon's Seal *Smilacina stellata*				X			
Field Cress *Lepidium campestre*		X					
Fringed Loostrife *Lysimachia ciliata*	X						
Frost Grape *Vitis riparia*	X						
Giant Foxtail *Setaria faberii*		X	X				
*Giant Ragweed *Ambrosia trifida*	X	X					

Table 1. (continued)

	Habitat						
	1	2	3	4	5a	5b	5c
Goldenrod *Solidago* sp.				X			
Grass-leaved Pondweed *Potamogeton gramineus* var. *graminifolius*							X
Great Bladderwort *Utricularia vulgaris*							X
Great Bullrush *Scirpus validus*						X	
Green Foxtail *Setaria viridis*		X	X				
Hedge Bindweed *Convolvulus sepium*			X				
Honeysuckle *Lonicera* sp.	X						
Hungarian Brome *Bromus inermis*		X	X				
Kentucky Blue Grass *Poa pratensis*	X	X	X				
Knotweed *Polygonum pensylvanicum*		X	X				
Lamb's Quarter *Chenopodium album*	X	X					
Large-leaved Pondweed *Potamogeton amplifolius*						X	
Mad-dog Skullcap *Scutellaria lateriflora*						X	
Mermaid Weed *Proserpinaca palustris*						X	
Mountain Mint *Pycnanthemum virginicum*				X			
Mouse-eared-chickweed *Cerastium* sp.	X	X					
Mulberry *Morus alba*							
Narrow-leaved Cattail *Typha angustifolia*						X	
Needle Spikerush *Eleocharis acicularis*							
Nimblewill *Muhlenbergia schreberi*				X			
Orchard Grass *Dactylis glomerata*	X						
Petioled Willow *Salix petiolaris*					X		

Table 1. (continued)

	Habitat						
	1	2	3	4	5a	5b	5c
Pineapple Weed *Matricaria matrcarioides*	X						
Purslane Speedwell *Veronica peregrina*			X				
Red Ash *Fraxinus pennsylvanica*	X						
Red Clover *Trifolium pratense*	X	X		X			
Red-stalked Plantain *Plantago rugellii*	X	X		X			
Reed *Phragmites communis*				X			
River Bullrush *Scirpus fluviatilis*		X			X		
Rose *Rosa* sp.	X						
Rough Avens *Geum laciniatum*	X						
Rush *Juncus* sp.						X	
Sandbar Willow *Salix interior*		X			X	X	
Scouring-rush *Equisetum arvense*				X			
Sedge *Carex* spp.						X	
Shepard's Purse *Capsella bursa-pastoris*	X						
Small Bedstraw *Galium trifidum*						X	
Small Duckweed *Lemna minor*						X	
Small-flowered Buttercup *Ranunculus abortivus*	X						
Small Pondweed *Potamogeton pusillus*							X
Sour Dock *Rumex acetosella*				X			
*Sow-thistle *Sonchus uliginousus*		X	X				
Spike-rush *Eleocharis* sp.					X	X	X
Stiff Water Crowfood *Ranunculus longirostris*							X
Swamp Milkweed *Asclepias incarnata*				X			X

Table 1. (continued)

	Habitat						
	1	2	3	4	5a	5b	5c
Tall Meadow Rue *Thalictrum dasycarpum*				X			
Violet *Viola* cf. *nephrophylla*				X			
Violet *Viola* cf. *papilionacea*	X						
Water Heartsease *Polygonum coccineum*					X		
Water Knotweed *Polygonum amphibium*					X		
Water Milfoil *Myriophillum exalbescens*						X	
White Clover *Trifolium repens*	X						
White Water-lily *Nymphaea tuberosa*						X	
Wild Black Cherry *Prunus serotina*			X	X			
Wild Carrot *Daucus carota*	X	X	X				
Wild Crane's Bill *Geranium maculatum*				X			
Wild Strawberry *Fragaria Virginiana*		X	X				
Wingstem *Actinomeris alternifolia*				X			
Yarrow *Achillea millefolium*	X		X				
Yellow Foxtail *Setaria lutescens*		X	X				
Yellow Rocket *Barbarea vulgaris*	X	X					
Yellow Water Crowfoot *Ranunculus flabellaris*							X

*Classified as a noxious weed in Illinois (Illinois Department of Agriculture, 1975)

DISCUSSION (Continued)

None of the plant species seen within the study site have the status of a threatened or endangered species (Schreiner, 1975). Indeed, the majority of the plant species recorded for the area comprise a weed flora of which several species are considered noxious by the State of Illinois (Illinois Department of Agriculture, 1975). On a more local level of consideration, none of the species found here are classed as rare in the Chicago Region (Swink, 1974), specifically in Cook County (Table 2). These facts correlate with the realization that the habitats represented in the site are not rare.

The upland habitats on the study site are of marginal quality to support bird, mammal, and reptile life. While numbers of migrant birds might be periodically high, the size and quality of the field and wooded areas are too low to support breeding or year-round populations otherwise typical of such habitats. The wetland areas on the site are of somewhat higher quality, and this may be reflected in the presence of typical aquatic bird species. In general, mammal populations are probably low. The muskrat population appeared low, as only two unmaintained lodges were present, although there may be active bank burrows. No racoon or carnivore tracks were observed. No species of vertebrate animals protected by the Illinois Endangered Species Protection Act is likely to be found on the study site.

Only a few fish species are to be found on the study site (Table 6). These are in the borrow pit pond; the other aquatic

DISCUSSION

Within the study site there occurs no unique assemblage of plant species. The habitats which are found here fall into two categories: 1) those which have been withdrawn from previous disturbance (such as cultivation) and are now in the begining stages of natural plant succession that would lead eventually to the development of a community representative of a kind which might have been present at the site prior to settlement times, and 2) those which are degraded from an undisturbed state but not totally destroyed. In the second category is placed one small remnant of a marsh. This is identified in the report as a wetland numbered area 5c. This marsh, if left entirely undisturbed from this time hence would gradually change into a mucky area without standing water and finally into a terrestrial ecological community. Disturbances such as the placement of the adjacent overburden piles and the run-off from I-57, as well as the past run-off from agricultural field, have probably hastened this natural process and may have had a significant effect on the species diversity. At the present time this marsh represents an interesting area to an aquatic biologist, but it is not unusual in Northern Illinois. All the remaining tracts within the site fall into the first category. They are similar and numerous such areas in the vicinity which have been withdrawn from farming.

CONCLUSIONS

On the basis of information obtained through site visits and a literature survey, it appears to us that the flora and fauna found on this site, either singly or in combination, are not unique or unusual enough, or of sufficient quality, to warrant preservation. Even if left undeveloped, the site would likely become of poorer quality by natural processes, because of its small size and proximity to other disturbed areas. Any recommendation that the area be used as a fish and/or wildlife habitat would have to incorporate extensive and costly management proposals for ecological restoration and improvement. Furthermore, development and use of the surrounding lands must be considered as influencing the suitability of the habitats for plant and animal life on this site.

DISCUSSION (continued)

areas are too shallow to be inhabited by fish. The moderately abundant Golden Shiner is a very commonly used bait fish and has likely been introduced by local fisherman. The same may be true of the minnows found, and the bullhead, sunfish and bass have also likely been introduced by local fish enthusiasts. The pond is so shallow as to expose the resident fished to severe winter kills, and, as the body of water becomes progressively shallower by natural siltation, this situation will worsen.

LAND USE ANALYSIS
PROPOSED SANITARY LANDFILL

NORTHWEST INTERSECTION OF INTERSTATE 57
AND SAUK TRAIL, RICH TOWNSHIP
COOK COUNTY, ILLINOIS

MAY, 1976

Prepared For:

JOHN SEXTON COMPANY
OAK BROOK, ILLINOIS

Prepared By:

ROLF C. CAMPBELL & ASSOCIATES, Inc.
LAKE BLUFF, ILLINOIS

SUMMARY OF CONCLUSIONS

As an interim use of land, the Sexton sanitary landfill in southwestern Rich Township will be compatible with surrounding development and consistent with plans for future development.

Compatibility With Existing Development - With few exceptions, existing development within the vicinity of the proposed sanitary landfill is to the east of Interstate 57. The area to the west of the Interstate - the side on which the sanitary landfill is planned - is characterized by predominantly rural land uses. Proper placement of berms as noise and site line buffers, combined with current landfill operating technology (i.e., daily cover of the filled area), will eliminate the potential of adverse effects accruing to nearby developed areas.

Consistency With Prospective Off-Site Development - Plans by local general purpose governments (Matteson, Richton Park, and Cook County) call for the area purlieu to the landfill to develop to industrial and/or office/research land use intensities. This type of development is generally compatible with landfilling activities and the ultimate use of the periphery of the Sexton site is contemplated to be utilized for congruous purposes.

Consistency With Prospective On-Site Land Uses - Subsequent improvement of the sanitary landfill site is contemplated to include open land uses for that area of the property to be subjected to landfilling, and industrial and/or office/research uses for that portion of the site not directly involved in the landfill construction activity. Both Richton Park and Matteson, in their comprehensive plans, identify the optimum use of the landfill site to be for recreation and for industrial-type purposes. The Cook County Comprehensive Land Use and Policies Plan designates the ultimate use of the site to be the same. Therefore, final development of the landfill site will be entirely consistent with the land use plans of affected governments.

Thus, from three land use perspectives (compatibility with existing land uses, compatibility with prospective on-site land uses, and compatibility with prospective surrounding land uses), the placement of a sanitary landfill on the subject site as an interim use of land is justified.

PREFACE - METHODOLOGY

This evaluation of the sanitary landfill proposed for the Southwest Quarter of Section 28 in Rich Township, deals only with the expected ramifications of the facility on surrounding lands and with the impact of the landfill on the subject site. Generally, a thorough land use analysis considers a proposed use from two perspectives:

1) Effect of the proposed use on existing land uses in the vicinity of the site, and

2) Influence of the proposed use on prospective land uses purlieu to the site and on the site itself.

Both of these aspects relate to the basic issue of "compatibility."

In scrutinizing the proposed landfilling operation, the Illinois Environmental Protection Agency (IEPA) has requested the petitioner to submit evidence which indicates that the landfill will comply with these eight standards:

*1) That the landfill is located so as to minimize scenic blight, and to avoid damage to archaeological and/or historic sites and areas of significant natural beauty;

*2) That the landfill is located so as to avoid any hazards to public health and safety and to minimize any offenses to the senses of persons residing, working, traveling, and/or in any way spending periods of time in the immediate vicinity. Immediate vicinity is here defined to mean a one-mile zone adjacent to the boundary of the site;

*3) Taking into consideration the character of the area involved, including the character of surrounding land uses and the trend of development, as well as local comprehensive plans and zoning ordinances, that the landfill is located so as to minimize incompatibility with the character of the surrounding area;

+4) That the landfill is located so as to avoid causing substantial depreciation of nearby property (taking into consideration, where possible, any mitigation caused by the short proposed life of the site and end use);

+5) That any detriments caused by removal of the site from its former use are out-weighed by the need in the area for a landfill at this location;

6) That the landfill is located so as to avoid a continued adverse effect on existing air and water quality; and

7) Taking into consideration geological and hydrological factors, the location of the site in relating to sources of solid waste and accessibility to transportation modes, and the technical feasibility and economic reasonableness of disposing of solid waste at the proposed location, that the landfill is suited for its intended use;

8) That municipal officials (and/or county officials, where applicable) as well as local zoning boards and planning agencies and state legislators from the district in which the landfill is located, and adjacent landowners have been notified of the intent to develop and operate a landfill at this location. In addition, that access roads and bridges are not limited to preclude necessary vehicular traffic (i.e. proposed size and weight limits).

As denoted by an asterick (*), the first three standards are those which relate directly to the issue of compatibility with surrounding areas. In addition, standards four and five, preceded by a plus (+), relate indirectly to land use compatibility of the proposed use.

Evidence is proffered in this report which provides substantiation that the proposed landfilling operation will be in compliance with the first five standards. Standard number four is specifically addressed in an accompanying report prepared by a professional appraiser. The methodology outlined above (existing land use analysis/prospective land use analysis) is adhered to in an effort to prove that the landfill is not deleterious to existing land uses, and will not adversely influence future uses.

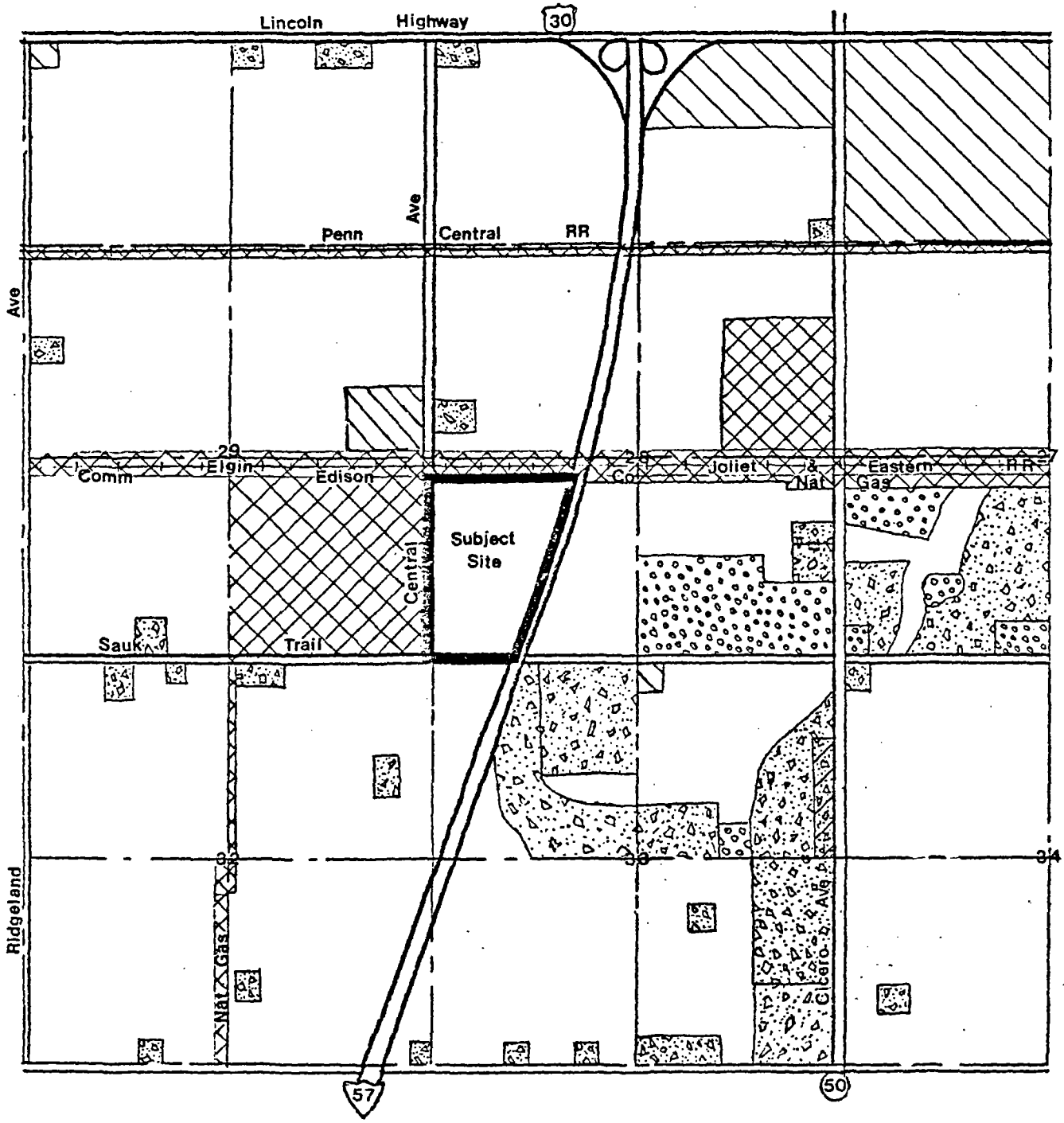
BACKGROUND INFORMATION

The proposed landfill facility is to be located in the Southwest Quarter of Section 28 in Rich Township, Cook County, Illinois. Central Avenue borders the site on the west, Sauk Trail is contiguous to the property on the south, Interstate 57 bounds the site on the east, and Elgin, Joliet, and Eastern Railroad, Commonwealth Edison, and Natural Gas rights-of-way lay adjacent to the property on the north.

Much of the area located west of Interstate 57 in southern Rich Township is of a primarily "rural" nature. In contrast, areas to the east of Interstate 57 reflect a more "urban" land use pattern. Figure 1, Regional Location Map, illustrates the site's position within the Chicago Metropolitan Area, and Figure 2, Existing Land Uses, depicts the current use of land in the southwestern portion of Rich Township.

Other than the natural gas storage facility that abuts the subject site on the west, and the railroad and utility rights-of-way abutting the site on the north, all land uses west of Interstate 57 in the vicinity of the proposed landfill are vacant or agricultural.

East of Interstate 57, predominantly having frontage along Cicero Avenue, are a variety of land uses. At the intersection of Route 30 (Lincoln Highway) and Cicero is an intensive commercial area which includes the Lincoln Mall Shopping Center (southeast corner) and a Jewel Shopping Center (southwest corner). North of the utility right-of-way on the west side of Cicero is an Allis-Chalmers manufacturing facility. South of the utility right-of-way and east of Cicero a sewage treatment plant is in operation. At the northwest corner of Cicero and Sauk Trail are a parochial school and church, with a branch of Rich Township High School South directly west thereof. Further south on Cicero is a residential planned unit development (under construction). The only two significant exceptions to this pattern of development characterized by Cicero Avenue frontage are the Lakewood Estates single-family development located south of Sauk Trail in the northwest quarter of Section 33 (under construction), and a single-family development in the southwest quarter of Section 27, north of Sauk Trail.



- Residential: Single-Family
- Residential: Multi-Family
- Commercial
- Industrial, Public Utilities, & Railroads
- Public, Recreational, & Institutional
- Vacant & Agricultural

MAP 2	EXISTING LAND USE (GENERALIZED) SEXTON / RICH TOWNSHIP	N	Scale: 1.3" = @ .5 MILES

Again, it is emphasized that in the direct vicinity of the subject property - west of Interstate 57 - no significant development has occurred. East of the Interstate, an urbanizing land use pattern is in evidence characterized by diverse land uses (residential, commercial, industrial, and public), with most of this activity being Cicero Avenue and Lincoln Highway oriented.

PLAN OF DEVELOPMENT

The landfill construction activity will serve two basic functions: to provide an accessible yet inconspicuous site for the processing and elimination of refuse, and to prepare a marginally developable property for future use consistent with governing comprehensive plans.

Two phases will comprise the landfill construction activity. The first, site preparation, involves readying the portion of the property to be subjected to landfilling, as well as creating an on-site transition between surrounding properties and the landfill area. During this stage, entrance roads, peripheral fences, and initial trenches will be constructed. Using the spoil taken from the trenches (and importing soil if necessary), an area to the west and south of the landfill site will be earth-filled. A 300 foot wedge from the center line of Central Avenue to the western boundary of the landfill construction activity, and a similar wedge from the center line of Sauk Trail to the southern border of the landfill will be included in the earth-fill operation. In addition to acting as a transition between the landfill and abutting properties, this 300 foot wedge will serve as a noise deterrent and act as a visual buffer. Berms will be constructed along the circumference of that portion of the site to undergo landfilling. Like the earth-filled area, these berms will provide noise insulation, site screening, and will deter refuse, dust, and debris from leaving the site.

During the second phase, site construction, refuse will be placed into trenches, compacted, and covered daily. As the area of filling moves inward within the property, temporary berms will be constructed for additional screening and sanitary purposes.

Land comprising the 300 foot transitional wedge will be conducive to immediate development. This portion of the property is anticipated to be placed in industrial and/or office and research uses, completely in compliance with local comprehensive plans. The area of the site actually landfilled will be reclaimed for open land uses (recreation, parking, open storage, etc.), again consistent with local plans.

RESPONSE TO IEPA INQUIRY

1) The landfill is located so as to minimize scenic blight, and avoid damage to archaeological and/or historic sites and areas of significant natural beauty.

Since the majority of land uses purlieu to the subject site west of the Interstate are agricultural, and because the area comprising the landfill construction activity is to be screened by berms and buffered by a 300 foot wide earth-fill wedge, it is unlikely that any scenic blight will develop in conjunction with the landfill. The advent of blowing dust and debris associated with sanitary landfilling will be controlled by the strategic placement of fences and berms, and daily cover of the filled area.

Another significant deterrent to visual disruption associated with the landfill is the location and elevation of Interstate 57. This regional expressway will provide additional site screening for areas to the east. Travelers along the Interstate, for the most part, will be visually buffered from the landfill by berms. However, a portion of the landfill construction activity as well as earth-moving and compacting equipment will be partially visible from Sauk Trail's grade separation with the Interstate.

According to the Illinois Historical Society, no historic sites exist in the vicinity of the subject site. Further, no archaeological sites are near the proposed landfill.

In summary, no visual disruption will be generated to adjacent and nearby properties or passersby as a result of the sanitary landfill. Proper placement of berms, fences, and construction of a transitional buffer insure this. The only exception to the landfill's non-disruptive impact on the scenic environment will be that people traveling on Interstate 57 may be able to perceive small portions of the landfill construction activity.

2) The landfill is located so as to avoid any hazards to public health and safety and to minimize any offenses to the senses of persons residing, working, traveling, and/or in any way spending periods of time in the immediate vicinity. Immediate vicinity is here defined to mean a one-mile zone adjacent to the boundary of the site.

Most development in the area of the proposed landfill is east of the Interstate; therefore, from a land use perspective, offenses to the senses in the immediate vicinity will not occur. In addition, because the area within a one-mile perimeter of the subject site is sparsely developed, no significant conflicts should occur between the operation of the landfill and residents or employees of the nearby area.

Noise levels generated from within the landfill site will not be noticeable to the north, east, and south. Current noise sources, especially Interstate 57 and nearby railroad routes, emit noise levels that are in excess of those contemplated in conjunction with the landfill construction activity. Hence, noise generated from the landfill will essentially be absorbed by current noise levels. A slight increase in noise level is expected to occur west of the subject site. Much of this increase in noise volume is associated with traffic operations; but, most of this noise will be absorbed within 250 to 300 feet of the subject site's boundaries. Thus, the

only property to be affected to the west is the natural gas storage facility - an industrial land use. (For a technical discussion of noise level generation, see ~~Section~~ Exh. D, B-10.)

3) Taking into consideration the character of the area involved, including the character of surrounding land uses and the trend of development, as well as local comprehensive plans and zoning ordinances, that the landfill is located so as to minimize incompatibility with the character of the surrounding area.

A sanitary landfill is a consistent and compatible land use, substantially in character with the surrounding area.

As previously discussed, existing land uses in the vicinity of the subject property are predominantly vacant or agricultural. Only east of the Interstate is an urbanizing land use pattern in effect, and this portion of Rich Township is screened from the subject site by Interstate 57. Additional visual screening will be provided by the placement of berms. From a land use standpoint, a functional difference exists between property situated east of Interstate 57, as opposed to land located west of the Interstate. This difference, as alluded to, is highlighted by urban land uses to the east and rural land uses to the west. With the subject property situated westerly to the Interstate in the rural area, it is clear that no encumbrances of a land use nature will accrue to properties east of Interstate 57.

Local comprehensive plans underline this functional difference in land use capacities. Matteson, Richton Park, and Cook County all show varying intensities of residential land uses for property east of the Interstate, and all show industrial and office/research land use intensities for property to the west of the Interstate. The "Cook County Comprehensive Land Use and Policies Plan" contrasts existing and future land use trends for Rich Township:

> A substantial increase in land devoted to Industrial and Office and Research uses is proposed for Rich Township. Land fronting on Interstate 57 is generally proposed for Office and Research use, while land abutting the two railroad lines, which traverse the south end of the Township from west to east, is forecasted for Industrial use...

From this description it is clear that the Sexton site is situated at an ideal location from a land use standpoint. The interim use of the site for a sanitary landfill constitutes an industrial land use consistent with the above expressed need for increased industry in Rich Township. With the property located at the junction of Interstate 57 and a major rail freight line, either office/research or industrial land uses would be consistent with the above planning statement. Either industrial or office/research land uses are anticipated to ultimately occupy the periphery of the subject site, again in compliance with comprehensive planning. Vacant and agricultural land located west of the subject site is also foreseen to be placed in industrial or office/research use. Thus, the interim use (sanitary landfill) and ultimate use (office/research or industrial) of the Sexton site are compatible and congruous with uses planned for adjacent properties.

Finally, the Richton Park and Cook County plans identify a portion of the subject site to be ultimately used for recreation and open purposes. This future open use is consistent with Sexton's plans to reclaim the landfill portion of the property for open uses (recreation, parking, and storage), and is also a realistic solution for reinstating the filled property.

According to Solid Waste Report (Northeastern Illinois Planning Commission, April, 1973, Page 96), a survey of reclaimed sanitary landfill sites indicated that recreational uses most often were cited as "land recovery purpose." The report also states:

> Among the most immediate, suitable and useful purposes for sanitary landfills are parks, playgrounds, golf courses, and landscaped urban buffers...

Several other recent reports concerning solid waste management (most notable: Sanitary Landfill: Design & Operation - USEPA, 1972; and Decision-Makers Guide in Solid Waste Management - USEPA, 1974) indicate that recreational functions are suitable

and even optimum land uses for reclaimed sanitary landfill sites. Conversely, sanitary landfills are appropriate methods for bringing future recreation sites to a workable grade, and hence, are good interim land uses for future recreation sites on below normal grade. (The subject site's elevation is lower than that of surrounding properties, especially the northern part of the property which was previously used as a borrow pit.)

Thus, the landfill construction activity and subsequent utilization for industrial, office/research, and open purposes is significantly compatible with existing development and is completely in character with local comprehensive plans. (Page 48 of the "Cook County Comprehensive Land Use and Policies Plan," highlighting future usage of unincorporated land, and the planning map from the Cook County comprehensive plan, are enclosed in the Appendix.)

4) The landfill is located so as to avoid causing substantial depreciation of nearby property taking into consideration, where possible, any mitigation caused by the short proposed life of the site and end use.

This standard is addressed in the real estate appraiser's evaluation of the site.

5) That any detriments caused by removal of the site from its former use are out-weighed by the need in the area for a landfill at this location.

The proposed landfill, while to be located in a predominantly rural area west of Interstate 57, has excellent vehicular access (Interstate 57, U.S. Route 30, Sauk Trail, Central Avenue) and is in direct proximity to a major center of population (southern Cook County).

According to the NIPC study, Solid Waste Report, residential, commercial, and industrial refuse generation is anticipated to increase significantly through 1995:

COOK COUNTY RESIDENTIAL,
COMMERCIAL, AND INDUSTRIAL REFUSE FORECAST
(in millions of tons)

	1972	1975	1985	1995
Residential	2.50	2.71	3.47	4.28
Commercial	.94	1.01	1.27	1.56
Industrial	1.78	1.94	2.49	3.01
Total	5.22	5.66	7.23	8.85

Based on this forecast, the need for additional sanitary landfills is inevitable. It is imperative that these waste disposal operations be channeled to suitable locations. The subject property, from all land use perspectives, appears to be an appropriate site for interim use as a sanitary landfill.

A potential detriment, commonly associated with a sanitary landfill's impact on nearby properties, is that those properties are less developable for low-intensity (i.e., residential) land uses. To offset this notion, a study was made of an existing Sexton landfill facility in Oak Brook, Illinois. The Oak Brook site is located in a more densely populated area of Cook County (in Proviso Township), and has been in operation for over 18 years.

Using aerial photographs taken in 1963, 1968, 1970, and 1975, a determination was made of the landfill's impact on development (see Appendix for photographs). The 1963 photograph depicts the landfill in its embryonic stages. Located east of Interstate 294, north of 31st Street, and south of 22nd Street, in 1963 the only significant nearby development was a new residential subdivision

just west of the Interstate. By 1968, homes situated in this subdivision, westerly to the landfill, had increased in number four-fold. In addition, northwest of the subject site (northwest of 22nd Street and the Interstate) six industrial and office/research structures had been constructed between 1963 and 1968. By 1970, additional industrial-type buildings were built in the industrial area, and new industrial construction had occurred east of the Oak Brook site. Also, commercial development not apparent in 1963 , had taken hold at several major intersections in the area (Wolf Road and 22nd Street, Wolf Road and 31st Street, etc.). Also, between 1963 and 1970, a new single-family residential subdivision was started on the east side of Wolf Road at approximately 26th Street (in Westchester). The latest photograph, taken in 1975, shows the residential area west of the Oak Brook site built out; the new single-family area in Westchester - one-quarter mile east of the Oak Brook property - built out; the industrial - office/research area northwest of the landfill - built out; and extensively developed commercial areas situated at all nearby primary intersections.

It is quite clear from this data, that the establishment and expansion of a sanitary landfill in an urbanizing area in no way inhibits development of nearby properties. The diverse land uses established between 1963 and 1975 in the vicinity of the site indicate that a landfill - if properly operated - will not hamper development. Another noteworthy point depicted by this information is that property located contiguous to Interstate thoroughfares and proximate to major local highways is a proper - and even optimum - location for sanitary landfills.

CONCLUSIONS

From a land use perspective, the operation of a sanitary landfill on the proposed Rich Township site is compatible with nearby surrounding land uses. Current uses west of Interstate 57 in the vicinity of the subject

property are predominantly agricultural and/or vacant. Hence, no deleterious effect will accrue to these lands due to the operation of a landfill.

Land east of Interstate 57 proximate the subject site is generally undeveloped, with an area along both Cicero Avenue and Lincoln Highway presently undergoing urbanization. The proposed landfill will not adversely affect these properties for two reasons: they are a significant distance from the landfill site, and the most advanced technology available will be utilized in operating the sanitary landfill.

According to both the Cook County and Richton Park comprehensive plans, the majority of the area to be subjected to landfilling is ultimately to be used for industrial, office/research, and/or open space purposes. A sanitary landfill is a wholly compatible interim use for properties where the prospective ultimate use is for industry and open space (both the Northeastern Illinois Planning Commission and the U. S. Environmental Protection Agency, in various reports, substantiate this). Further, because that portion of the site to undergo landfilling is below grade, a sanitary landfill would again appear to be an appropriate mechanism for rendering the site amenable to other land uses.

Finally, the area immediately surrounding the proposed landfill site is unlikely to be subjected to urbanization in the near future. It is conceivable that the subject site will be "filled out" prior to a demand being generated for development of the surrounding area. If, in fact, such a demand should develop concurrent to operation of the landfill, the "Cook County Comprehensive Land Use and Policies Plan," as well as the Matteson and Richton Park comprehensive plans, call for the vast majority of surrounding lands to be put into industrial use. Not only is a sanitary landfill compatible with most industrial land uses, but a sanitary landfill itself is often classified as an interim industrial use (see Cook County Zoning Ordinance - 1976, and U. S. Standard Industrial Classification Code).

Thus, from all possible land use perspectives - consistency with existing uses, compatibility with proposed on- and off-site land uses, and compliance with governing comprehensive plans - the establishment of a sanitary landfill at the site proposed is a reasonable and harmonious use of land.